



**Air Quality
TIER II OPERATING PERMIT
And
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT No.: T2-040121

FACILITY ID No.: 055-00039

AQCR: 62

CLASS: SM

SIC: 2421

ZONE: 11

UTM COORDINATE (km): 521.6, 5310.2

1. PERMITTEE

Merritt Brothers Lumber Company – Remanufacturing Division

2. PROJECT

Permit Modification – Construction of Fifth Dry Kiln

3. MAILING ADDRESS

Post Office Box 190

CITY

Athol

STATE

ID

ZIP

83801

4. FACILITY CONTACT

Jim Warren

TITLE

Mill Manager

TELEPHONE

208-683-3321

5. RESPONSIBLE OFFICIAL

Jim Warren

TITLE

Mill Manager

TELEPHONE

208-683-3321

6. EXACT PLANT LOCATION

NE ¼ NW ¼ Section 16, Township 56 North, Range 3 West

COUNTY

Kootenai

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Dimensional lumber remanufacturing

8. PERMIT AUTHORITY

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400-470 and IDAPA 58.01.01.200-228. This permit pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit. Only the terms and conditions pertaining to the Tier II operating permit requirements are subject to the expiration date of this permit.

This permit is not transferable to another person, place, or piece or set of equipment. This permit will expire if construction has not yet begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho*.

DATE ISSUED: PROPOSED

TONI HARDESTY, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE EXPIRES: November 26, 2007

Table Of Contents

ACRONYMS, UNITS AND CHEMICAL NOMENCLATURE.....	3
1. PERMIT SCOPE.....	4
2. FACILITY-WIDE CONDITIONS.....	5
3. NO. 1 AND NO. 2 NATURAL GAS-FIRED BOILERS	8
4. DRY KILNS – FIVE TOTAL.....	9
5. PLANER MILL AND FINGER-JOINTING MILL.....	10
6. SUMMARY OF EMISSION LIMITS.....	11
7. GENERAL PROVISIONS.....	12

Acronyms, Units And Chemical Nomenclature

AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
DEQ	Idaho Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pounds per hour
MMbdf/yr	million board feet per year
MMBtu/hr	million British thermal units per hour
NO _x	nitrogen oxides
OP	operating permit
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of 10 micrometers or less
PTC	permit to construct
SIC	Standard Industrial Classification Code
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

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Location:	Athol, Idaho		Date Expires	November 26, 2007

1. PERMIT SCOPE***Purpose***

- 1.1 The permit modification is to allow for the construction of the facility's fifth dry kiln. The permit incorporates the applicable requirements of PTC No. 040106, issued to the facility September 13, 2004.
- 1.2 Tier II Operating Permit and Permit to Construct No. T2-040121 replaces PTC No. P-040106, issued September 13, 2004, the terms and conditions of which shall no longer apply.

Regulated Sources

- 1.3 Table 1.1 below lists all sources of emissions that are regulated in this permit.

Table 1.1 REGULATED EMISSION SOURCES

Permit Section	Source Description	Emission Controls
2,3	Cleaver Brooks gas-fired boiler No.1, Model L-59569, 29.3 MMBtu/hr, constructed in 11/74 and installed at the facility in 2/01. Cleaver Brooks gas-fired boiler No.2, Model CB200-350, 14.65 MMBtu/hr, constructed in 4/73 and installed at the facility in 9/04.	None
2,4	Five dry kilns with an allowable throughput of 170 MMbdft/yr	None
2,5	Cyclone and Baghouse No. 4 – Planer Mill Cyclone No. 5 – Finger-jointer cyclone – Finger-jointing Mill Cyclone No. 6 – Finger-jointer cyclone (pull through) – Finger-jointing Mill	Cyclones and baghouse
2	Fugitive emissions sites (i.e. old planer chip bin truck loadout, planer shavings bin truck loadout, and plant road.)	Reasonably control (Fugitive dust management plan)

Permit Requirements Summary

- 1.4 Table 1.2 below summarizes the action items required in this permit.

Table 1.2 REPORTING, RECORDKEEPING, and MONITORING SUMMARY

Requirement Description	Frequency	Permit Condition
Fugitive complaint log	As needed	2.3
Visible emission inspections of cyclones/baghouse/truck bins	Every calendar quarter	2.5
Maintaining on-site records	Five years	2.6
Monitor throughput of all kilns	Monthly and 12-month summation	4.5

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2. FACILITY-WIDE CONDITIONS***Fugitive Emissions***

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne, as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:
- Use, where practical, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands;
 - Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust;
 - Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations;
 - Covering, where practical, open-bodied trucks transporting materials likely to give rise to airborne dusts;
 - Paving, where practical, of roadways and their maintenance in a clean condition;
 - Prompt removal, where practical, of earth or other stored material from streets.
- 2.2 The permittee shall comply with the fugitive dust management plan submitted to DEQ on January 15, 2003. Updated as necessary, the plan shall identify all sources at the facility that may emit fugitive dust, appropriate dust control methods for each source, and recordkeeping procedures for documenting the frequency and methods used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Visible Emissions

- 2.4 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this section.

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- 2.5 The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential point source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance. The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test, and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Monitoring and Recordkeeping

- 2.6 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to: the date, place, and times of sampling or measurements; the date analyses were performed; the company or entity that performed the analyses; the analytical techniques or methods used; the results of such analyses; and the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request

Excess Emissions

- 2.7 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

Reports and Certifications

- 2.8 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to:

Air Quality Permit Compliance
Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814

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Fuel-burning Equipment

- 2.9 The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gaseous fuel.

Open Burning

- 2.10 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning*.

Air Stagnation Advisory Days

- 2.11 The permittee shall comply with the requirements of IDAPA 58.01.01.550 through 562, *Air Pollution Emergency Rule*.

Obligation to Comply

- 2.12 Receiving this permit shall not relieve the owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

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3. NO. 1 AND NO. 2 NATURAL GAS-FIRED BOILERS**3.1 Process Description**

The Cleaver Brooks boilers generate steam heat for the dry kilns.

3.2 Control Description

Boiler emissions from the combustion of natural gas are uncontrolled.

Emissions Limits**3.3 Emissions Limits**

PM₁₀ and VOC emissions from the boilers shall not exceed any corresponding emissions rate limits listed in Table 3.1.

Table 3.1 BOILER EMISSIONS LIMITS

Source Description	PM₁₀	VOC
	lb/day	T/yr
Gas-Fired Boiler No.1	5.24	0.96
Gas-Fired Boiler No.2	2.62	0.48

[PTC Condition]

Operating Requirements**3.4 Boiler Fuel Specification**

To demonstrate compliance with Permit Condition 3.3, Boiler No. 1 and Boiler No.2 shall be fired on natural gas exclusively.

[PTC Condition]

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4. DRY KILNS – FIVE TOTAL**4.1 Process Description**

The facility consists of five dry kilns used to dry green lumber. The dry kilns are heated using non-contact steam coils, with steam being supplied by Boiler No. 1 and Boiler No. 2. The dry kilns have five heat exchangers. This permit allows for the construction of the fifth dry kiln.

4.2 Control Description

Emissions from the dry kilns are uncontrolled.

Emission Limits**4.3 Emission Limits**

- PM₁₀ emissions from the five dry kilns shall not exceed 90.72 lb/day.
- VOC emissions from the five dry kilns shall not exceed 73.10 T/yr.

[PTC Condition]

Operating Requirements**4.4 Maximum Facility Throughput**

- The maximum lumber throughput to the five dry kilns shall not exceed 24.75 MMdft/month, board scale, in any month.
- The maximum lumber throughput to the five dry kilns shall not exceed 170 MMbdf/yr, board scale, in any consecutive 12-month period.

[PTC Condition]

Monitoring and Recordkeeping Requirements**4.5 Lumber Throughput**

The permittee shall monitor and record, monthly and annually, the lumber throughput to the five dry kilns to demonstrate compliance with Permit Conditions 4.3 and 4.4. Throughput shall be recorded as board feet, board scale. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT No.: T2-040121

Permittee:	Merritt Brothers Lumber Co.	Facility ID No. 055-00039	Date Issued:	PROPOSED
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5. PLANER MILL AND FINGER-JOINTING MILL**5.1 Process Description**

The facility contains several lumber processing areas, including a planer mill and a finger-jointing mill. Wood residuals (chips, shavings, and wood dust) generated from these process areas are pneumatically transferred to three cyclones where the wood residuals are separated from the air stream into two different truck bins.

5.2 Control Description

PM₁₀ emissions from planer mill cyclone No. 4 are controlled by the planer mill baghouse, which are connected in series. PM₁₀ emissions from finger-jointing mill cyclone No. 5 and finger-jointing mill cyclone No. 6 are uncontrolled.

Emission Limits**5.3 Emission Limits**

PM₁₀ emissions from the planer mill cyclone No. 4 and planer mill baghouse, finger-jointing mill cyclone No. 5 and finger-jointing mill cyclone No. 6 shall not exceed and corresponding emissions rate limits listed in Table 5.1.

Table 5.1 BAGHOUSE AND CYCLONE EMISSIONS LIMITS

Point Source Description	PM ₁₀
	lb/day
Planer mill cyclone, No.4 with baghouse	39.7
Finger-jointing mill cyclone, No.5	12.6
Finger-jointing mill cyclone (pull-through), No.6	12.6

[PTC Condition]***Operating Requirements*****5.4 Planer Mill and Finger-jointing Mill Operating Requirements**

Planer mill cyclone No. 4 and the planer mill baghouse shall be operated whenever the planer mill is operated. Finger-jointing mill cyclone No. 5 and finger-jointing mill cyclone No. 6 shall be operated whenever the finger-jointing mill is operated.

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6. SUMMARY OF EMISSION LIMITS**MERRITT BROTHERS LUMBER COMPANY – ATHOL****Table 6.1 EMISSION LIMITS – HOURLY (lb/hr) AND ANNUAL (T/Yr)**

Source Description	PM ₁₀	VOC
	lb/day	T/yr
Gas-fired Boiler No.1	5.24	0.96
Gas-fired Boiler No.2	2.62	0.48
Drying Kilns	90.72	73.10
New Planer Cyclone, No.4	39.7	NA
Finger Jointer Cyclone, No.5	12.6	NA
Finger Jointer Cyclone (pull-through), No.6	12.6	NA

Notes: Compliance determined by a pollutant-specific U.S. EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

Compliance with annual limits determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

PM₁₀ limits include condensibles.

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7. GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. In the event of any change in control or ownership of source(s) covered by this permit, the permittee and succeeding owner or controller shall notify DEQ of the change in ownership. Any proposed change(s) or modification(s) to this permit by the succeeding owner or controller shall be requested in accordance with the *Rules for the Control of Air Pollution in Idaho*.
6. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
7. The Director may require the permittee to develop a list of operation and maintenance procedures to be submitted to DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
8. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT No.: T2-040121

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9. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:
- Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date